

ILLINOIS POLLUTION CONTROL BOARD
August 1, 1985

CITY OF DIXON,)
)
 Petitioner,)
)
 v.) PCB 85-112
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by W.J. Nega):

This provisional variance request comes before the Board upon an August 1, 1985 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 15-day extension of a previously granted provisional variance be granted to the City of Dixon (Dixon) from 35 Ill. Adm. Code 304.141(a) to allow time for the completion of necessary repairs and modifications to its wastewater treatment facility's chlorine contact tank and chlorination system which were begun under the provisional variance granted in PCB 85-103. (Rec. 1; see: Opinion and Order of July 11, 1985 in PCB 85-103, City of Dixon v. IEPA).

In reference to the need for additional time to complete the requisite repair work, Mr. Karl Merbach, the Superintendent of the Petitioner's sewage treatment plant, has indicated in a letter to the Agency that:

"Due to complications encountered during repairs to our chlorine contact tank at the Dixon Sewage Treatment Plant, we will be unable to meet the provisional variance date of July 31, 1985. Our estimation of the time it would take for sandblasting and painting as well as replacement of plastic baffle sheeting was not accurate. We did not have the personnel nor the time to devote our full workday to this project as daily plant operations has taken up much of the time we had scheduled for this work.

We now have all the materials needed to complete this project on the work site and hope to be operational within a week. We are requesting that an extension be granted for an additional fifteen days to allow us to complete this work. The fifteen days should give us enough time and cushion to allow for

days when weather or other emergency would cause us to cancel work for that day.

We have been working very hard to complete the much needed work to the chlorination system as this project has become a learning experience. Any future projects of this type should go smoother and more time efficient..."

(Rec. 6).

The City of Dixon owns and operates a wastewater treatment facility (WWTP) which has a design average flow of 3.4 million gallons per day (MGD) and consists of raw sewage pumps, comminutors, primary sedimentation, aeration tanks, grit removal, final sedimentation, disinfection, anaerobic sludge digestion, sludge storage, and sludge drying beds. (Rec. 1). The Petitioner's WWTP discharges its effluent to the Rock River pursuant to its NPDES Permit No. IL 0026450.

The Petitioner's NPDES Permit provides that the city's wastewater treatment facilities must meet final effluent limits for its main outfall 001 and is required to meet effluent limits of 20 mg/l for biochemical oxygen demand (BOD); 25 mg/l for total suspended solids (TSS), and a fecal coliform standard of 400/100 ml. (Rec. 1).

During the past year, the Petitioner's discharge monitoring reports to the Agency pertaining to fecal coliform and chlorine residual in its effluent have indicated the following concentrations:

<u>Month</u>	<u>Flow (MGD)</u>	<u>Chlorine Residual (mg/l)</u>	<u>Fecal Coliform (#100 ml)</u>
May, 1985	3.101	0.35	14
April, 1985	3.197	0.25	278
March, 1985	4.373	0.20	3,000
February, 1985	3.156	0.30	142
January, 1985	4.046	---	---
December, 1984	3.255	0.40	223
November, 1984	3.114	0.40	313
October, 1984	3.124	0.30	166
September, 1984	2.588	---	---
August, 1984	2.727	---	---
July, 1984	2.918	---	---
June, 1984	3.164	0.40	7
Average	3.230	0.33	138*

*Geometric Mean

(Rec. 2)

Although the Petitioner added chlorination facilities to its WWTP in 1967, no major repair work was done to these chlorination facilities since their installation. However, the Petitioner has indicated that, as an interim measure, some repairs were

undertaken in 1984 when they became necessary. (Rec. 2). The City of Dixon intends to discharge effluent from the final sedimentation tanks to the Rock River via its old outfall while its chlorination facilities are out of service. The outfall in question is a 20 to 30 foot long open channel which runs from the final sedimentation tanks to the Rock River. (Rec. 2).

Because there is no feasible way that chlorine can be added to the point where the Petitioner's effluent leaves the final sedimentation tanks and since the open channel which will be utilized "does not allow for sufficient contact time before the effluent reaches the river", there appears to be no practical alternative to discontinuing disinfection while the Petitioner's chlorination facilities are out of service. (Rec. 2-3). However, the Agency anticipates minimal environmental impact during the time period of the requested provisional variance due to the high dilution ratio of greater than 200 to 1 of river water to effluent. Additionally, the environmental impact will be minimized because there are no public bathing beaches or potable water supply intakes downstream from Dixon's discharge point to the Quad Cities. (Rec. 3).

The Agency has noted that the City of Dixon has applied for a standard variance in PCB 85-47 for relief from the provisions of 35 Ill. Adm. Code 304.120 (deoxygenating wastes) until it installs new clarifiers at its WWTP, but emphasizes that the repair work that will be done on the Petitioner's chlorination facilities is entirely separate and distinct from the repair work delineated in Dixon's regular variance petition in PCB 85-47. (Rec. 3).

In reference to the instant provisional variance extension request in PCB 85-112, the City of Dixon has indicated that: (1) it has the necessary materials and manpower to expeditiously repair and restore the chlorination facilities at this time; (2) the chlorination facilities do not presently provide adequate contact time; (3) the condition of its chlorination facilities is becoming worse; and (4) if the requisite repair work is not promptly completed, the chlorination facilities may fail completely at a time when weather conditions might be unfavorable or when the appropriate manpower is unavailable, thereby resulting in the chlorination facilities being out of service for a longer period of time. (Rec. 3).

Accordingly, the Agency has concluded that compliance on a short-term basis with the requisite NPDES Permit standards would impose an arbitrary or unreasonable hardship upon the City of Dixon. Therefore, the Agency recommends that the Board grant the Petitioner a provisional variance extension from disinfection requirements for an additional 15 days beginning August 1, 1985, or until the chlorination facilities are returned to service, whichever occurs first.

Pursuant to Section 35(b) of the Illinois Environmental Protection Act, the Board hereby grants the provisional variance as recommended.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The City of Dixon is hereby granted a provisional variance from 35 Ill. Adm. Code 304.141(a), subject to the following conditions:

1. This provisional variance shall commence on August 1, 1985 and shall continue until August 15, 1985, or until the Petitioner's chlorination facilities are returned to service, whichever occurs first.
2. The Petitioner shall contact Mr. Gary Reside of the Agency's Compliance Assurance Unit via telephone at 217/782-9720 when the chlorination facilities are returned to service. This telephone notification shall be followed-up within 5 days with a written notification sent to Mr. Gary Reside at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, Illinois 62706
Attention: Mr. Gary Reside

3. Within 10 days of the date of the Board's Order, the Petitioner shall execute a Certificate of Acceptance and Agreement which shall be sent to Mr. James Frost of the Agency at the address specified in item #2 of this Order.

This certification shall have the following form:

CERTIFICATION

I, (We) _____, having read the Order of the Illinois Pollution Control Board in PCB 85-112 dated August 1, 1985, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 1st day of August, 1985 by a vote of 7-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board